



JORDAN VALLEY WATER  
CONSERVANCY DISTRICT

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Legislative Water  
Development  
Commission

June 16, 2022

# Water Conservation: Update, Progress, and Direction

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Bart Forsyth  
General Manager / CEO  
Jordan Valley Water Conservancy District



## Water Conservancy Districts offer 3 key services:

### Delivering Water



- Manage increasingly complicated water supply
- Treat water to exceed regulatory requirements
- Maintain growing and aging infrastructure

### Managing Demand



- Promote efficient use of water through incentives, programs, and ordinances
- Encourage landscaping appropriate for Utah
- Develop a water conservation ethic

### Developing Supply



- Identify most cost-effective water supply alternatives
- Plan and support water projects decades in advance of demand
- Secure funding for long-term water development projects

Effective water conservation programs are based on three primary building blocks

## Education



Customer bills and water use reports

Web portals and use alerts

Landscape Consultations



## Incentives

Water rates and fees

Toilet and smart controller rebates



**Strategic WATER MANAGEMENT**

## Regulations



Water conservation plans

Landscape ordinances

Plumbing standards

Secondary metering



# Education

Effective education helps water users make sound choices and preserve water resources for the future



# Education

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## Customer Feedback

“Becoming an educated water consumer”

### Personalized Information

- Water use trends (hourly, daily, monthly, yearly)
- Leak alerts
- Irrigation schedules
- Correlation between water used and money spent
- Customized water use tips
- Water units vs. total gallons

### Relevant Comparisons

- Efficient Use Benchmarks
  - Indoor and outdoor watering needs based on weather, landscape needs, and number of people living at the home
- Social Norms Theory
  - Misperceptions about our peers influences our own behaviors
  - Counter by showing what peers are really doing

**JORDAN VALLEY WATER**  
CONSERVANCY DISTRICT  
8215 South 1300 West  
West Jordan, UT 84088  
Phone (801) 565-4300  
jvwcd.org

Service Address City, State, Zip Account  
S LOOKOUT PEAK DR RIVERTON, UT, 84096

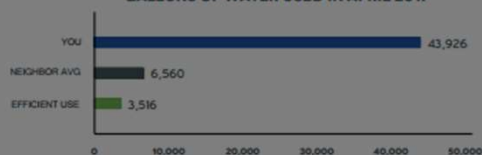


S LOOKOUT PEAK DR  
RIVERTON, UT 84096

✂ Detach and return this portion with your payment. Please keep the portion b

### managing your USAGE

#### GALLONS OF WATER USED IN APRIL 2017



### how do you compare?



Compared to efficient use this April:

You used an additional **40,410** gallons of water, costing you an extra **\$79.20** this month.

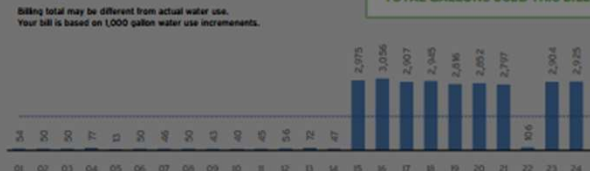
### water use TIP

Learn about our conservation programs and how you can participate at [ConservationGardenPark.org](http://ConservationGardenPark.org).

### daily USAGE

Billing total may be different from actual water use.  
Your bill is based on 1,000 gallon water use increments.

#### TOTAL GALLONS USED THIS BILL



## account SUMMARY



**Account Number** 8215 South 1300 West  
West Jordan, UT 84088  
Phone (801) 565-4300

**Service Address** LOOKOUT PEAK DR  
RIVERTON, UT

**Bill Date** 5/8/2017

**Previous Balance** \$16.94  
**Adjustments** \$0.00  
**Last Payment** \$0.00  
**Interest/Penalty** \$0.00  
**Unpaid Balance** \$16.94  
**Current Charges** \$89.24

**TOTAL DUE** \$106.18  
**Due Date** 6/5/2017

Billing details located on back.

**visit** [MYWATER.JVWCD.ORG](http://MYWATER.JVWCD.ORG)  
for **detailed account** and  
**water use information.**

**paying:** Pay online, on the phone, by mail, or in the office.  
**checks:** Please write your account number on the check and make the check payable to: Jordan Valley Water Conservancy District or JVWCD  
**charges:** A late payment charge of 1.5% may be charged to any unpaid balance per month (annual percentage rate 18%).

**Hours:** Monday – Friday 8:00am to 5:00pm  
**Phone:** (801) 565-4300  
**Fax:** (801) 256-4498  
**Website:** [jvwcd.org](http://jvwcd.org)  
**Address:** 8215 South 1300 West, West Jordan, UT 84088

Address	Account Number	Statement Date
DR		5/8/2017

	Present Read Date	Previous Meter Reading	Present Meter Reading	Read Code*	Usage (1,000 gallons)	Rate per 1,000 gallons	Charge
7	5/1/2017					0.00	\$3.00
7	5/1/2017	375	419	A	44	1.96	\$86.24

### Summary:

Previous Balance	\$16.94
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### Due Date

**6/5/2017**

### Total Amount Due

**\$106.18**

Service Address City, State, Zip  
S LOOKOUT PEAK DR RIVERTON, UT, 84096



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RIVERTON, UT 84096

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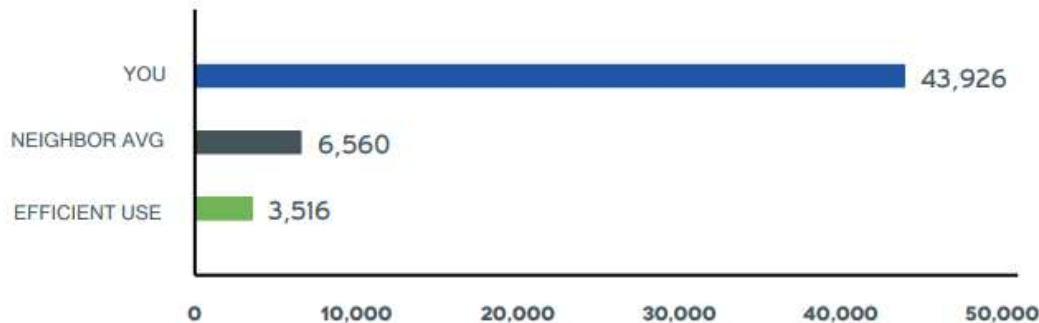
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8:00am to 5:00pm

West, West Jordan, UT 84088

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CONSERVANCY DISTRICT  
8215 South 1300 West  
West Jordan, UT 84088  
Phone (801) 565-4300  
jvwcd.org

Pay  
ONLINE  
jvwcd.org

Credit/Debit Card - eCheck/EFT - Auto Pay  
Please write your account number on your check and make  
checks payable to: Jordan Valley Water Conservancy District or JVWCD

Service Address	City, State, Zip	Account Number	Bill Date
S LOOKOUT PEAK DR	RIVERTON, UT, 84096		05/08/2017
		Due Date	Amount Due

Paying your water bill:

**Paying:** Pay online, on the phone, by mail, or in the office.

**For Checks:** Please write your account number on the check and make the check payable to: Jordan Valley Water Conservancy District or JVWCD

**Late Payment Charges:** A late payment charge of 1.5% may be charged to any unpaid balance per month (annual percentage rate 18%).

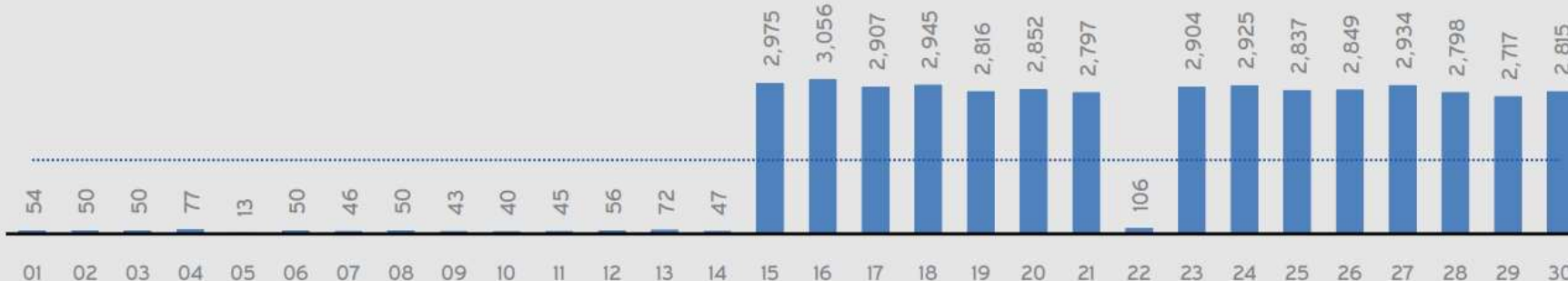
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43,926

**DAILY AVERAGE**  
April 2017  
1,464 gallons/day



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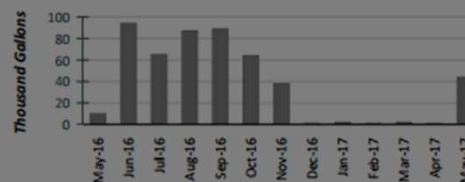
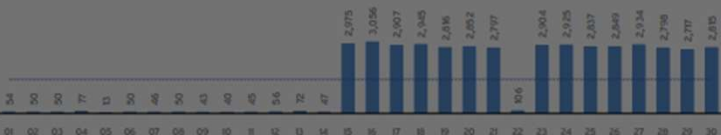
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# Conservation Garden Park

(8275 S. 1300 W. West Jordan, UT)



- With more than nine acres of exhibits, pathways and Utah-friendly plants, Conservation Garden Park is Salt Lake County's premier destination for information about water-efficient landscaping. Owned and operated by JVCWD, the Garden is open year-round with free admission to all patrons.
- Classes, tours, educational exhibits, field trips, community events, plant database, and online education.



# Incentives

Effective incentive programs can influence water users to make structural changes that reduce water demand

# Utah Water Savers



utahwatersavers.com

Apply today for a  
**FREE consultation or cash rebates!**

(Programs available throughout most of JVWCD's service area)



Cash rebates for homeowners who purchase a smart controller for their irrigation system.



Cash rebates for homeowners who replace toilets that were installed before 1994.



Cash rebates for homeowners who convert grass park strips to water-efficient designs.

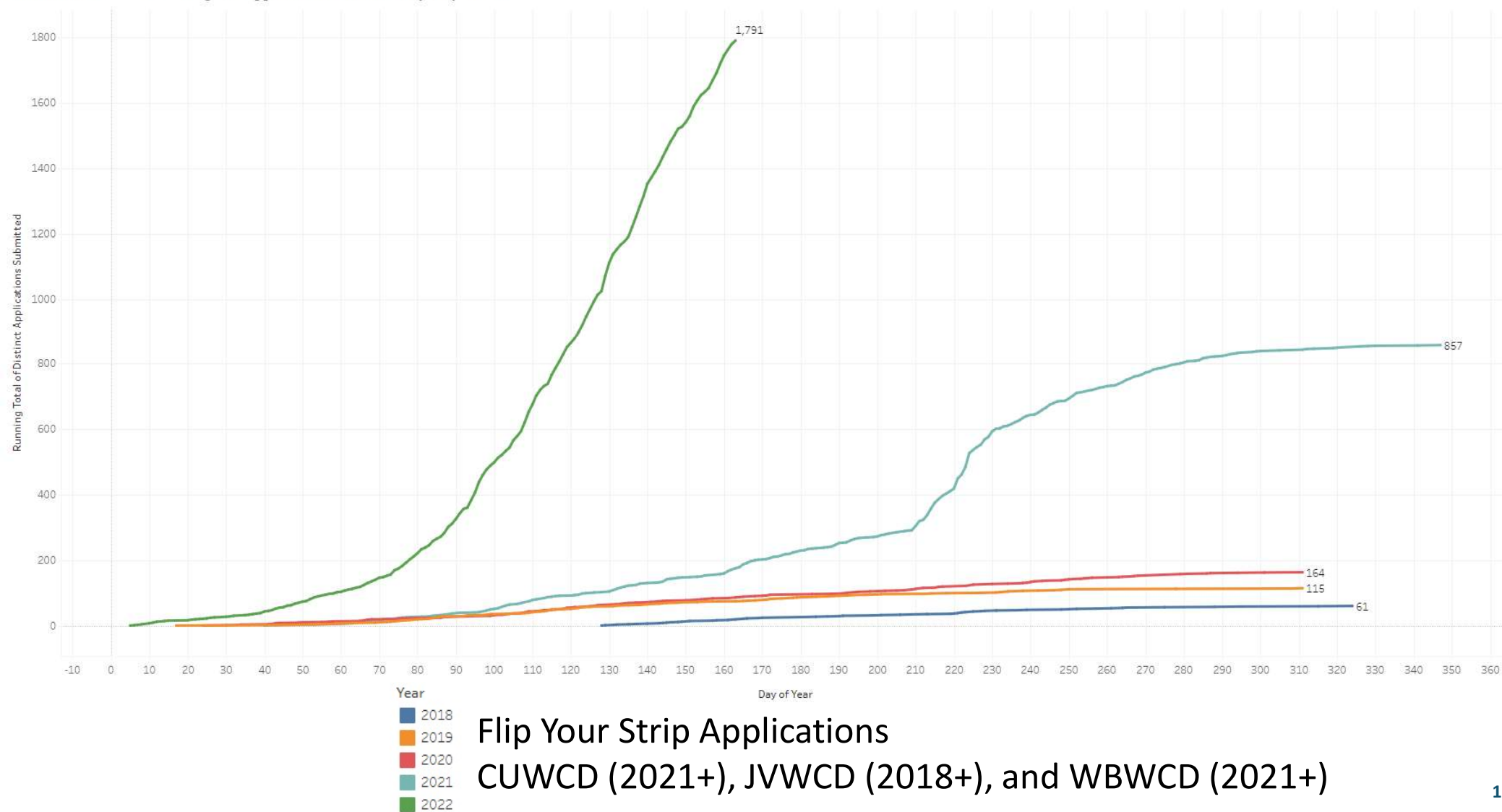


Free consultations for homeowners wanting to improve the water efficiency of their yard.



Cash rewards and landscape plan reviews for those who complete Localscapes projects.

UtahWaterSavers.com - Program Applications Submitted by Day of Year



## how do I APPLY?

Complete the online interest form at  
[jvwcd.org/landscapeleadershipgrant](http://jvwcd.org/landscapeleadershipgrant)

Or email the following information to  
[grants@jvwcd.org](mailto:grants@jvwcd.org):

- Applicant's contact information (name, address, phone, email).
- Project owner's name and address, if different from applicant.
- Project address.
- Description of project.
- Estimated project start date and finish date.
- Estimated landscape cost. (provide contractor bid if applicable)
- Landscape construction plans (include planting and irrigation sheets).

### Applicant Requirements:

- Recipient must be a commercial business, builder/developer, institution, or property management company.
- Project must be located within the JVWCD service area.
- Project must provide quantifiable water savings.
- Project must have high promotional, marketing, or press appeal.
- Landscape changes must be voluntary and not for the purpose of complying with a governmental code or policy.



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801-565-4300



example projects

# Landscape LEADERSHIP grants

FOR BUILDERS • DEVELOPERS  
COMMERCIAL BUSINESSES AND INSTITUTIONS  
• HOMEOWNERS ASSOCIATIONS



JORDAN VALLEY WATER  
CONSERVANCY DISTRICT

*Funding for prominent,  
water-efficient  
landscaping projects.*





# Regulations

Effective regulations have indoor and outdoor water efficiency standards to help create more sustainable communities

# Residential Landscape Standards

- Applicable to front and side yards.
- Lawn is designed as an open space that does not exceed 35% of the total landscaped area.
- lawn is prohibited in park strips and other narrow areas less than 8' wide.
- Drip irrigation is used in planting beds.
- Exceptions to these standards can be made in certain small lot scenarios.



## Commercial Landscape Standards

- Lawn is less than 20% of the landscaped area (except for active recreation zones).
- Lawn is not used in areas narrower than 8 feet (park strips, parking lot islands, etc).
- Lawn is free from obstructions and is not used on steep slopes.
- Drip irrigation is used in planting beds.
- Plant materials create at least 50% living plant cover at maturity (recommended).
- New landscape projects are submitted to the municipality to ensure they meet water conservation requirements.
- Certain special purpose landscape areas may receive variances to the standards based on need (ex. stormwater management areas).





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## Key Benefits of Adopting Water Efficiency Standards

- Every land use decision is a water management decision. As land is developed, it creates a perpetual commitment for how water will be used for many decades.
- Reductions in outdoor consumption will result in lower peaking factors, infrastructure costs, and water conservation expenses.
- The cost to retrofit a landscape to be water-efficient is 5 times higher than installing it to be water-efficient from the beginning.
- Water-efficient landscapes are more compatible with Utah's arid climate, are more resilient to droughts, and can more easily adapt to the trending hotter and drier climate conditions in the future.



## Member Agency Adoption of Water Efficiency Standards

JVWCD's Water Efficiency Standards are comprehensive outdoor landscaping requirements intended for all new construction. The cities that have adopted or are in compliance with these standards have shown leadership in planning for the future and building drought-resilient communities.

### Herriman City

- **December 19, 2020**
- Adopted as City ordinance

### South Jordan

- **May 4, 2021**
- Adopted as City ordinance

### West Jordan

- **June 9, 2021**
- Adopted as City ordinance

### Retail System

- **June 9, 2021**
- Adopted as JVWCD policy

### Bluffdale City

- **July 14, 2021**
- Adopted as City ordinance

### Kearns Metro Township

- **February 14, 2022**
- Adopted as Township ordinance

### West Valley City

- **August 12, 2022**
- Adopted by resolution



## Indoor Fixtures

- Recommendations on water use standards



**Toilets:** 1.28 gallons per flush (gpf) or less – 20% less water than the current federal standard maximum of 1.6 gallons per flush



**Urinals:** Flushing urinals must use no more than 0.5 gpf, compared to the current federal standard of 1 gpf



**Showerheads:** Must demonstrate that they use no more than 2.0 gallons per minute (gpm), instead of the 2.5 gpm federal standard



**Faucets:** Must have a flow of no more than 1.5 gallons per minute (gpm), compared to the federal of 2.2 gpm

# Water Rates

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Example from JWCDC's  
retail service area

## **4 Tier Rate Structure**

With the primary goal of creating relevant tier thresholds and price signals, the rate design includes tiers based on the following:

1. Typical winter use for the
2. Typical shoulder season use for the majority
3. Typical peak season use for the majority
4. Excessive use beyond service level expectations



# Water Use History

Water use comparisons and metrics

Jordan Valley Water Conservancy District  
Annual Gross & End Usage per Capita (gpcd)





# Roadblocks

Barriers and constraints to water conservation

# Potential Roadblocks

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Other areas of consideration

- Widescale adoption of water efficiency standards
- Public sentiment
- Integration of water and land use
- Resources (funding, staffing, and professionals)
- Inefficient water use fixtures and irrigation systems



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*Delivering Quality Every Day®*